

16 3-31-03



ENTERED

TECH CENTER 1600/2900

JAN 29 2003

RECEIVED 1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/867,847A

DATE: 01/23/2003

TIME: 07:44:48

Input Set : A:\50291.005001.SEQLIST.TXT

Output Set: N:\CRF4\01232003\I867847A.raw

```

4 <110> APPLICANT: Chalifour, Robert
5      Hebert, Lise
6      Kong, Xianqi
7      Gervais, Francine
9 <120> TITLE OF INVENTION: Vaccine for the Prevention and Treatment
10     of Alzheimer's and Amyloid Related Diseases
13 <130> FILE REFERENCE: 50291/005001
15 <140> CURRENT APPLICATION NUMBER: 09/867,847A
16 <141> CURRENT FILING DATE: 2001-05-29
18 <150> PRIOR APPLICATION NUMBER: 09/724,842
19 <151> PRIOR FILING DATE: 2000-11-28
21 <150> PRIOR APPLICATION NUMBER: 60/168,594
22 <151> PRIOR FILING DATE: 1999-11-29
24 <160> NUMBER OF SEQ ID NOS: 65
26 <170> SOFTWARE: FastSEQ for Windows Version 4.0
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 42
30 <212> TYPE: PRT
31 <213> ORGANISM: Artificial Sequence
33 <220> FEATURE:
34 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
36 <400> SEQUENCE: 1
37 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
38  1              5              10              15
39 Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile
40      20              25              30
41 Gly Leu Met Val Gly Gly Val Val Ile Ala
42      35              40
45 <210> SEQ ID NO: 2
46 <211> LENGTH: 40
47 <212> TYPE: PRT
48 <213> ORGANISM: Artificial Sequence
50 <220> FEATURE:
51 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
53 <400> SEQUENCE: 2
54 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
55  1              5              10              15
56 Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile
57      20              25              30
58 Gly Leu Met Val Gly Gly Val Val
59      35              40
62 <210> SEQ ID NO: 3
63 <211> LENGTH: 35

```

RAW SEQUENCE LISTING

DATE: 01/23/2003

PATENT APPLICATION: US/09/867,847A

TIME: 07:44:48

Input Set : A:\50291.005001.SEQLIST.TXT

Output Set: N:\CRF4\01232003\I867847A.raw

```

64 <212> TYPE: PRT
65 <213> ORGANISM: Artificial Sequence
67 <220> FEATURE:
68 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
70 <400> SEQUENCE: 3
71 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
72 1 5 10 15
73 Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile
74 20 25 30
75 Gly Leu Met
76 35
79 <210> SEQ ID NO: 4
80 <211> LENGTH: 28
81 <212> TYPE: PRT
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
87 <400> SEQUENCE: 4
88 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
89 1 5 10 15
90 Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys
91 20 25
94 <210> SEQ ID NO: 5
95 <211> LENGTH: 7
96 <212> TYPE: PRT
97 <213> ORGANISM: Artificial Sequence
99 <220> FEATURE:
100 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
102 <400> SEQUENCE: 5
103 Asp Ala Glu Phe Arg His Asp
104 1 5
107 <210> SEQ ID NO: 6
108 <211> LENGTH: 7
109 <212> TYPE: PRT
110 <213> ORGANISM: Artificial Sequence
112 <220> FEATURE:
113 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
115 <400> SEQUENCE: 6
116 Tyr Glu Val His His Gln Lys
117 1 5
120 <210> SEQ ID NO: 7
121 <211> LENGTH: 6
122 <212> TYPE: PRT
123 <213> ORGANISM: Artificial Sequence
125 <220> FEATURE:
126 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
128 <400> SEQUENCE: 7
129 Lys Leu Val Phe Phe Ala
130 1 5

```

RAW SEQUENCE LISTING

DATE: 01/23/2003

PATENT APPLICATION: US/09/867,847A

TIME: 07:44:48

Input Set : A:\50291.005001.SEQLIST.TXT

Output Set: N:\CRF4\01232003\I867847A.raw

133 <210> SEQ ID NO: 8
134 <211> LENGTH: 12
135 <212> TYPE: PRT
136 <213> ORGANISM: Artificial Sequence
138 <220> FEATURE:
139 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
141 <400> SEQUENCE: 8
142 Tyr Glu Val His His Gln Lys Leu Val Phe Phe Ala
143 1 5 10
146 <210> SEQ ID NO: 9
147 <211> LENGTH: 9
148 <212> TYPE: PRT
149 <213> ORGANISM: Artificial Sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
154 <400> SEQUENCE: 9
155 His His Gln Lys Leu Val Phe Phe Ala
156 1 5
159 <210> SEQ ID NO: 10
160 <211> LENGTH: 7
161 <212> TYPE: PRT
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
167 <400> SEQUENCE: 10
168 Val Gly Gly Val Val Ile Ala
169 1 5
172 <210> SEQ ID NO: 11
173 <211> LENGTH: 6
174 <212> TYPE: PRT
175 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
180 <400> SEQUENCE: 11
181 Lys Ile Val Phe Phe Ala
182 1 5
185 <210> SEQ ID NO: 12
186 <211> LENGTH: 7
187 <212> TYPE: PRT
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
193 <400> SEQUENCE: 12
194 Lys Lys Leu Val Phe Phe Ala
195 1 5
198 <210> SEQ ID NO: 13
199 <211> LENGTH: 6
200 <212> TYPE: PRT
201 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING

DATE: 01/23/2003

PATENT APPLICATION: US/09/867,847A

TIME: 07:44:48

Input Set : A:\50291.005001.SEQLIST.TXT

Output Set: N:\CRF4\01232003\I867847A.raw

203 <220> FEATURE:
204 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
206 <400> SEQUENCE: 13
207 Lys Phe Val Phe Phe Ala
208 1 5
211 <210> SEQ ID NO: 14
212 <211> LENGTH: 6
213 <212> TYPE: PRT
214 <213> ORGANISM: Artificial Sequence
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
219 <400> SEQUENCE: 14
220 Ala Phe Phe Val Leu Lys
221 1 5
224 <210> SEQ ID NO: 15
225 <211> LENGTH: 4
226 <212> TYPE: PRT
227 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
232 <400> SEQUENCE: 15
233 Lys Leu Val Phe
234 1
237 <210> SEQ ID NO: 16
238 <211> LENGTH: 6
239 <212> TYPE: PRT
240 <213> ORGANISM: Artificial Sequence
242 <220> FEATURE:
243 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
245 <400> SEQUENCE: 16
246 Lys Ala Val Phe Phe Ala
247 1 5
250 <210> SEQ ID NO: 17
251 <211> LENGTH: 5
252 <212> TYPE: PRT
253 <213> ORGANISM: Artificial Sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
258 <400> SEQUENCE: 17
259 Lys Leu Val Phe Phe
260 1 5
263 <210> SEQ ID NO: 18
264 <211> LENGTH: 6
265 <212> TYPE: PRT
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
271 <400> SEQUENCE: 18
272 Lys Val Val Phe Phe Ala

RAW SEQUENCE LISTING

DATE: 01/23/2003

PATENT APPLICATION: US/09/867,847A

TIME: 07:44:48

Input Set : A:\50291.005001.SEQLIST.TXT

Output Set: N:\CRF4\01232003\I867847A.raw

```

273 1 5
276 <210> SEQ ID NO: 19
277 <211> LENGTH: 6
278 <212> TYPE: PRT
279 <213> ORGANISM: Artificial Sequence
281 <220> FEATURE:
282 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
W--> 284 <221> NAME/KEY: MOD_RES
285 <222> LOCATION: 6
286 <223> OTHER INFORMATION: Amidation
W--> 288 <400> 19
289 Lys Ile Val Phe Phe Ala
290 1 5
293 <210> SEQ ID NO: 20
294 <211> LENGTH: 6
295 <212> TYPE: PRT
296 <213> ORGANISM: Artificial Sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
W--> 301 <221> NAME/KEY: MOD_RES
302 <222> LOCATION: 6
303 <223> OTHER INFORMATION: Amidation
W--> 305 <400> 20
306 Lys Leu Val Phe Phe Ala
307 1 5
310 <210> SEQ ID NO: 21
311 <211> LENGTH: 6
312 <212> TYPE: PRT
313 <213> ORGANISM: Artificial Sequence
315 <220> FEATURE:
316 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
W--> 318 <221> NAME/KEY: MOD_RES
319 <222> LOCATION: 6
320 <223> OTHER INFORMATION: Amidation
W--> 322 <400> 21
323 Lys Phe Val Phe Phe Ala
324 1 5
327 <210> SEQ ID NO: 22
328 <211> LENGTH: 6
329 <212> TYPE: PRT
330 <213> ORGANISM: Artificial Sequence
332 <220> FEATURE:
333 <223> OTHER INFORMATION: Synthetic, All D peptides or peptidomimetics
W--> 335 <221> NAME/KEY: MOD_RES
336 <222> LOCATION: 6
337 <223> OTHER INFORMATION: Amidation
W--> 339 <400> 22
340 Ala Phe Phe Val Leu Lys
341 1 5

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/867,847A

DATE: 01/23/2003
TIME: 07:44:49

Input Set : A:\50291.005001.SEQLIST.TXT
Output Set: N:\CRF4\01232003\I867847A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:57; Xaa Pos. 4
Seq#:58; Xaa Pos. 5
Seq#:59; Xaa Pos. 4,5
Seq#:60; Xaa Pos. 4
Seq#:61; Xaa Pos. 5
Seq#:62; Xaa Pos. 4,5
Seq#:63; Xaa Pos. 4
Seq#:64; Xaa Pos. 5
Seq#:65; Xaa Pos. 4,5

VERIFICATION SUMMARY

DATE: 01/23/2003

PATENT APPLICATION: US/09/867,847A

TIME: 07:44:49

Input Set : A:\50291.005001.SEQLIST.TXT

Output Set: N:\CRF4\01232003\I867847A.raw

L:284 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:288 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19
L:301 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:305 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
L:318 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:322 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:21
L:335 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:339 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:22
L:352 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:356 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23
L:369 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:373 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:24
L:386 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:390 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:25
L:403 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:407 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:26
L:433 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:437 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:28
L:502 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:506 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:33
L:519 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:523 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:34
L:536 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:540 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:35
L:553 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:557 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:36
L:570 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:574 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:37
L:587 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:591 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:38
L:604 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:608 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:39
L:621 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:625 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:40
L:638 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:642 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:41
L:655 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:659 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:42
L:672 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:676 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:43
L:689 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:693 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:44
L:706 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:710 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:45
L:723 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:727 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:46
L:740 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:744 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:47

VERIFICATION SUMMARY

DATE: 01/23/2003

PATENT APPLICATION: US/09/867,847A

TIME: 07:44:49

Input Set : A:\50291.005001.SEQLIST.TXT

Output Set: N:\CRF4\01232003\I867847A.raw

L:757 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:761 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:48
L:774 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:778 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:49
L:791 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:795 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:50
L:808 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:812 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:51
L:825 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:829 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:52
L:842 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:846 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:53
L:859 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:863 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:54
L:876 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:880 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:55
L:893 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:897 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:56
L:910 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:914 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:57
L:918 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:57
L:919 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:0
L:931 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:935 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:58
L:939 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:58
L:940 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:0
L:952 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:956 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:59
L:960 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:59
L:961 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:0
L:973 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:977 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:60
L:981 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:60
L:982 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0
L:994 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:998 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:61
L:1002 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:61
L:1003 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0
L:1015 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1019 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:62
L:1023 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:62
L:1024 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0
L:1036 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1040 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:63
L:1044 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:63
L:1045 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:0
L:1057 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1061 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:64
L:1065 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:64

VERIFICATION SUMMARY

DATE: 01/23/2003

PATENT APPLICATION: US/09/867,847A

TIME: 07:44:49

Input Set : A:\50291.005001.SEQLIST.TXT

Output Set: N:\CRF4\01232003\I867847A.raw

L:1066 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:0
L:1078 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1082 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:65
L:1087 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:0